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Symbols

A_{yy}	-	Coefficient of added mass moment of inertia for pitching motion
a	-	Virtual mass, or virtual mass moment of inertia
a_z	-	Added mass for heaving
B	-	Coefficient of pitch damping moment
B_n	-	Waterline breadth for nth section
b	-	Coefficient for damping force or damping moment
b_n	-	Damping coefficient per unit length
C	-	Coefficient for pitch restoring moment
c	-	Coefficient for restoring force or restoring moment
E	-	Wave energy per unit area of free surface
h_w	-	Height of wave
I_{yy}	-	Mass moment of inertia for pitching
k	-	Wave number
k_{yy}	-	Radius of gyration for pitching
LBP	-	Length between perpendiculars
L_w	-	Wavelength from crest to crest
L_s	-	Length of ship equivalent to LBP
R_{AW}	-	Mean resistance increase in waves, that is, resistance in waves minus resistance in still water

T_e	-	Period of encounter
T_w	-	Wave period
T_z	-	Natural period (in smooth water) for heaving
T_θ	-	Natural period (in smooth water) for pitching
T_ϕ	-	Natural period (in smooth water) for rolling
u	-	Horizontal component of water velocity vertical component of water velocity
V_w	-	Wave velocity or celerity
z	-	Heaving motion
z_a	-	Heaving amplitude
β	-	Sectional area coefficient
ε	-	Phase angle between motions and waves
ε_1	-	Phase angle between wave motion and exciting force (or moment)
ε_2	-	Phase angle between exciting force (or moment) and motions
ζ	-	Instantaneuous wave elevation
ζ_a	-	Wave amplitude
$\overline{\zeta_a}$	-	Apparent wave amplitude
θ	-	Pitch angle
θ_a	-	Pitch amplitude
μ	-	Heading angle
ω_e	-	Frequency of encounter
ω_w	-	Wave frequency
ω_z	-	Natural (circular) frequency for heaving

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